EQUIPMENT DATA

EQUIPMENT DESCRIPTION: MESSAGING BOARD, PHARMACY WAITING AREA

ITEM SYMBOL: U0037

MANUFACTURER: ACF TECHNOLOGIES **LOGCAT:** C

EXT. DIM.: REFER TO CUT SHEET

SEISMIC: NO **WEIGHT:** 14 LBS

HVAC:

HEAT GAIN (BTU/HR)

VENT SIZE: **CFM:** **S.P**.

REMARKS:

PLUMBING:

HOT WATER
SIZE:
PRESSURE:
FLOW RATE:
TEMP.:

COLD WATER
SIZE:
PRESSURE:
FLOW RATE:

TREATED WATER
TYPE:
SIZE:
PRESSURE:
FLOW RATE:

STEAM
SIZE:
PRESSURE:
FLOW RATE:

DRAIN
SIZE:

RETURN
PUMPED:
GRAVITY:
SIZE:

	SIZE	TYPE	PRESSURE
OXYGEN:			
AIR:			
VACUUM:			
N20:			
NITROGEN:			
GAS:			

REMARKS:

ELECTRIC:

VOLTAGE: 120 **AMPS:** **WATTS:**

PHASE: 1 **HZ:** 60 **H.P.:**

REMARKS:

SPECIAL REQUIREMENTS:

ITEM REQUIRES A CONDUIT CONNECTION BETWEEN DISPLAY AND KEYBOARD. ITEM REQUIRES A WALL RECEPTACLE NEAR THE DISPLAY CABINET. ITEM REQUIRES STRUCTURAL SUPPORT.

DATE: MAY 19, 2011

REVISED
12:49 pm, Nov 14, 2011

Active Duty
T5574
Please wait in the lobby waiting area and listen for your number to be called.
KIDCARE... Free or Low Cost health insurance for children ages 0-18
For Information call (954) INSURES
Welcome To County Government Plaza
Special Announcement
Check out our New Website at: www.hsmv.state.fl.us
Now Serving
At Counter
A105 8
C622 6
B403 2
A110 1
The 8th Street office will be closed next week due to the holiday weeke
Online Performance Dashboard
Customer Reception
Directions & Information
Real-Time Metrics

New Provider of Queuing and Take-a-Number Systems in the Naval Pharmacy Market

MANAGE THE FULL CYCLE OF YOUR PATIENT FLOW

ACF Technologies combines web-based software, non-proprietary hardware devices and the highest level of service & support to offer your pharmacy an innovative and cost-effective alternative to meet all of your queuing needs.

Here are just some of the benefits of an ACF Solution:

- **Web-based Queuing** – One PC or server can drive all locations
- **Non-Proprietary Hardware**- Utilize off the shelf POS printers, LCD monitors – Including OFF THE SHELF TICKETS!
- **Non-Proprietary Database** – You own your data!
- **Call Patients Forward Using Naval Standard**– Last Initial, last four digits of the social security number (call out of order)
- **Web-based TV Display** – Does not require a PC or VGA Cables
- **No Client Software** – Easy to update, upgrade and service
- **Innovative, Intuitive Software** – Easy to use, manage and interface (CHCS, McKesson, ScriptPro, Etc.)
- **Excellent Customer/Technical Support** – Instant response!

Our customers include:

- Navy Medical Center San Diego (13 Pharmacies)
- Navy Medical Center Portsmouth (8 Pharmacies, Labs, Clinics)
- Navy Medical Center Okinawa (2 Pharmacies)
- Naval Air Station Jacksonville (2 Pharmacies)

MAXIMIZE PATIENT THROUGHPUT through enhanced public guidance systems, more effective patient reception, routing methodologies and smarter utilization of staff resources.

ACCESS REAL-TIME METRICS that measure wait and transaction times, total service time and abandonment/diversion rates. The ACF solution features easy-to-use statistical tools that provide an enterprise view of productivity, service and performance levels, customer flow patterns and more.

TRACK THE ENTIRE PRESCRIPTION FILL PROCESS along with the patient flow. The ACF Solution utilizes MS SQL as its core database, which allows pharmacies to port in real-time data from their automated distribution applications. Pharmacy managers can now merge the two data sets allowing for more enhanced oversight and benchmarking of organizational goals.

est. 1936
Health Department
To ensure your privacy, we have assigned this number to you for your visit today.
T5574
Please wait in the lobby waiting area and listen for your number to be called.
05/18/05 17:11
KIDCARE.... Free or Low Cost health insurance for children ages 0-18
For Information call (954) INSURES

LAST INITIAL, LAST FOUR DIGITS OF THE SSN#

Q-Flow allows you to call patients to the counters using the DOD standard identifier (last initial and last four digits of the SSN) – printed on tickets, called through the voice system and displayed on the TV monitors – allows you to call patients in the order in which their prescriptions are filled

ACF TECHNOLOGIES

phone: 800.704.6592

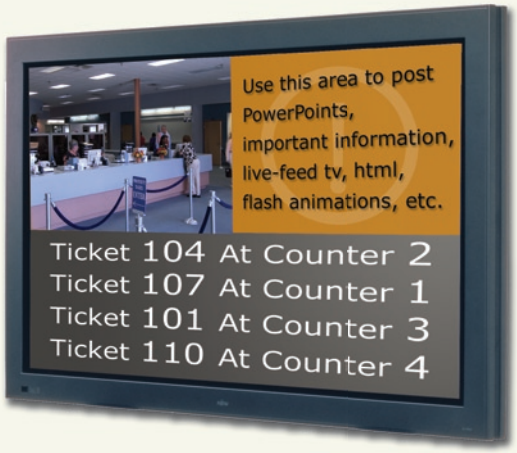
www.acftechnologies.com

Utilizing state of the art software and expert industry knowledge, ACF Technologies can facilitate the development of solutions that reduce patient cycle time, develop benchmarks for efficiency and positively impact patient and staff satisfaction.

"I NEED REAL TIME DATA **to benchmark** MY PHARMACY'S PERFORMANCE"

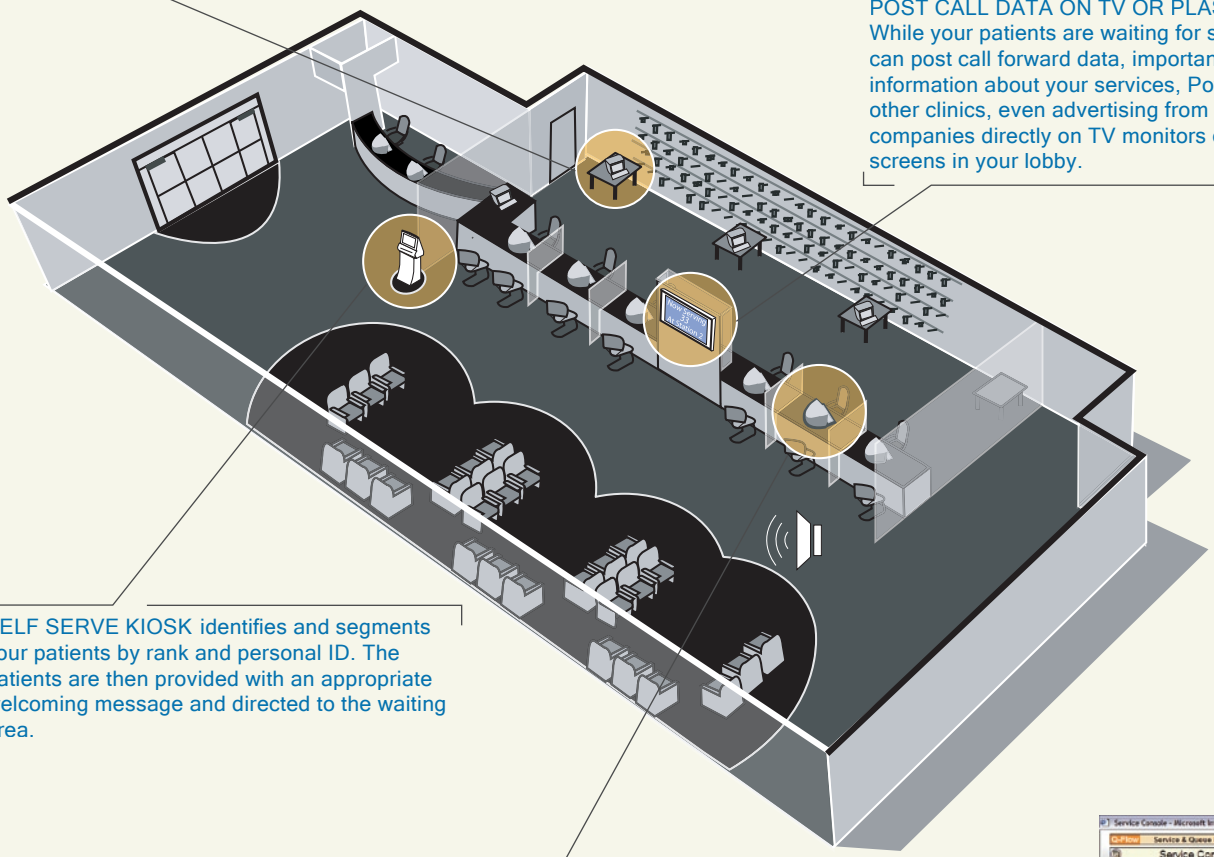
PATIENT FLOW SOLUTIONS THAT FIT YOUR NEEDS

YOUR ENTIRE ENTERPRISE ON A SINGLE SERVER
ACF Technologies can support a distributed network of campuses, registration areas, clinics and labs, all accessible through a standard MS internet browser. This allows you to install, manage and support your entire enterprise centrally through a single, secure (SSL supported) and easy-to-update user interface.


Use this area to post PowerPoints, important information, live-feed tv, html, flash animations, etc.
Ticket 104 At Counter 2
Ticket 107 At Counter 1
Ticket 101 At Counter 3
Ticket 110 At Counter 4

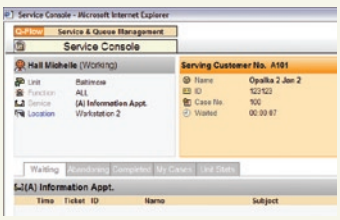
PHARMACY SYSTEM INTERFACE - Because the ACF core software application utilizes SQL Server as its database system, it can easily port in data in real time from your MS SQL and Oracle-based Prescription Filling Systems.

POST CALL DATA ON TV OR PLASMA SCREENS
While your patients are waiting for service, you can post call forward data, important instructions, information about your services, PowerPoints from other clinics, even advertising from pharmaceutical companies directly on TV monitors or plasma screens in your lobby.



SELF SERVE KIOSK identifies and segments your patients by rank and personal ID. The patients are then provided with an appropriate welcoming message and directed to the waiting area.

SERVICE CONSOLE allows staff to effortlessly observe waiting patients, call them forward and transfer to other counters, consult rooms or other pharmacy facilities.



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United States Navy Medical Center San Diego - Patient Flow Synopsis

Project History:
Dr. Michael Vancheri is the Director of Pharmacy for the entire USNMC SD system throughout the greater San Diego area. He oversees every pharmacy in all 14 hospitals, dealing with largest volume of DOD patients in the entire United States.

In 2005, the Command was becoming very unhappy with the level and quality of service currently being provided by the Queuing system already in place. Not only did this system limit their ability to adapt to the great changes in their patient flow caused by the large influx of service men and women and their families, but they were also having service issues that caused the system to crash at inopportune times. In addition to this, they were not happy with the customer-service afforded to them by the queuing company.

It was decided by leadership that a new system from another provider was warranted and they made initial contact with ACF Technologies at this time. Because of the extremely large volume of patients (up to 3000 a week) they were experiencing large wait times. This was compounded by the fact that the currently installed system slowed down some of the back-end processes.

ACF's solution was to install a system that would allow fluidity in the check-in area and allow for better segmentation of the patients by rank. Also, ACF eliminated the reliance on a static ticketing scheme, an unfortunate deficiency in the other system. This allowed the pharmacy to have up to 5 stations registering patients in times of great influx as well as shift their counter configuration to better dispense the prescriptions.

Priority Calling By Rank
The NMCSD pharmacy prioritizes patients by rank, so certain types of patients need to have a higher priority than others. Because the ACF solution is so adaptable, it can very easily accommodate any variation of services, priorities and functions. Another advantage of the system immediately perceived by the command was not only its ability to demonstrate in real time the current situation in the waiting area, but also to react and make changes in order to further optimize the environment.

Call Patients Using "V-Number"
Because each patient's prescription fill time varies, the pharmacy needed to come up with a scheme for calling patients out of order. They also needed to way to relate the prescription fill system to the ACF system so that they could call without having to cross-reference the two systems (another deficiency of the older queuing system). ACF was easily able to accommodate this by integrating the DOD standard identification number scheme into the software. This standard is the first initial of the last name and the last four digits of the social security number.

Now, when the counter sees that a prescription has been filled in the prescription system, they can choose the corresponding number in the ACF system calling the patient forward. An added benefit to this is that the patients waiting do not feel that they were skipped over because the numbers being called are not in numerical order.

Patient Flow Description:

- As the patients arrive, they approach the information desk
- The attendant ask what rank they are and issue a ticket for the particular service
- The ticket has a greeting message and their specific alphanumeric character (DOD Standard) The patients would then be directed to the Registration waiting area where they can relax or fill out necessary paperwork
- While the patients are waiting, the ACF Media Player is programmed to display sequenced images, posters, real-time scrolling messages, Cable TV, DVDs, even PowerPoint presentations
- When the Pharm-Techs in each of the counter-areas (a total of 12) are ready for the next patient, they press "NEXT" on an on-screen software application
- The ACF Media Player will interrupt the feed to display a call message for a few moments. This call message will then be cached into a line view showing the last 5-10 numbers called

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- An audio unit then announces, “Now Serving Patient R2234 At Counter Number One” (or some variation) over a speaker system
- The patient then proceeds to the appropriate workstation and picks up their prescription
- Managers for each of the areas are able to view and generate real-time and historical statistics reports based on wait times, service times and staff productivity, as well as manage the counters in real time

Noted Benefits of the System Implementation:

- Immediate decrease in patient confusion about where to go or who is next in line
- Much more efficient and effective patient flow
- Metrics are available in real time as well as historically that display thresholds, wait times, transaction times, staff productivity and due diligence
- Wait and Service time threshold notifications that alert the managers of excessive times respectively
- Plasma Monitor in the lobby can display DVD videos on a schedule about health subjects and benefits available
- Cost savings from the use of non-proprietary hardware devices: ticket printers using non-proprietary paper

Recent Enhancements

Once the system was shown to enhance the flow of patients, the efficiency of the staff as well as save the pharmacy money, NMCSD has expanded the application to all of the 13 remaining pharmacies in the San Diego system including the Veteran’s Affairs pharmacy.

There is also considerable movement within these hospitals to expand to other clinics, labs and registration areas within the NMCSD including Immunizations and Dental Health.

ACF has also developed a Live Search Tool that allows the manager to look up statistical details related to the queuing system by name. This tool has provided a customer service benefit to the overall management process by enabling the manager to type a complaining patient’s last name into a field and instantly pulling up information on their visit (wait, transaction and prescription fill times and the technician who worked with them).

Another recent enhancement has allowed patients to check the status of their prescription-fills on a Touchscreen kiosk by scanning the barcode on their tickets.

ACF Background

ACF Technologies, Inc. was founded in 2003 by queuing industry veterans with 20+ years of specialized combined experience in the development and deployment of advanced customer and patient flow solutions. ACF’s goal was to re-engineer the processes and methodologies lacking in the applications offered within the queuing industry.

ACF utilizes the most up-to-date development and architecture concepts and techniques to implement the first and most advanced real-time, **truly web-based**, enterprise customer and patient flow automation tool in the US market.

ACF currently has installed Q-Flow Patient Queuing Systems in pharmacies, labs, immunization clinics and other clinics at the ***Portsmouth Naval Medical Center, Okinawa Naval Medical Center and Jacksonville Naval Air Station***. Worldwide, ACF has nearly 500 queuing installations installed in organizations such as the US State Dept., the Dept. of Homeland Security, Boeing, healthcare enterprises, county Depts. of Health, private clinics, retail stores and airports.

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ACF Technical Requirements for Q-Flow v5.x

Q-Flow Server Requirements

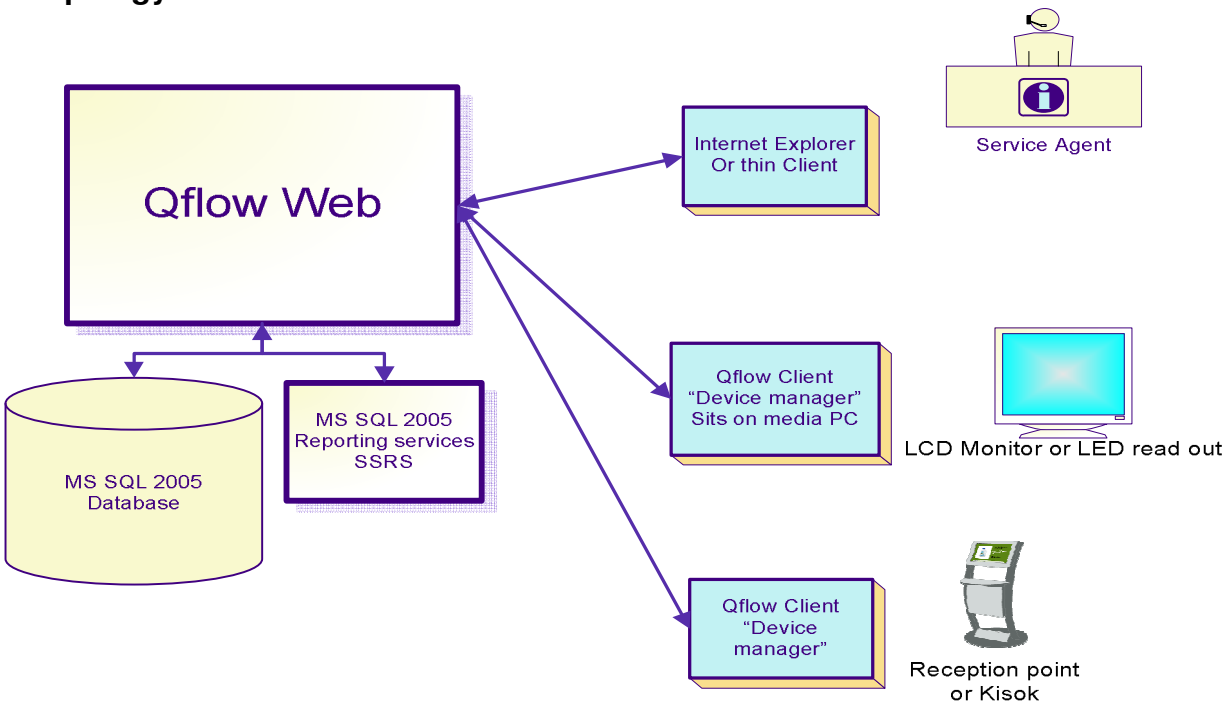
- WEB - Windows 2003/2008 Server with IIS and ASP.net 2.0
- DATABASE - MS SQL Server 2005 / 2008 including client components (i.e. MS SQL Management Studio and Business Development Studio).
- Default instance of Microsoft Reporting Services
- Dot.Net 3.5 framework (SP1)
- Min Server specs: 4 gig RAM, Pentium Dual Core+
- Requires a fixed IP address for server(s)
- ACF supports a VM environment for Q-Flow

Workstation PC

For the workstation PCs or thin clients:

- Must have network access to server
- Internet Explorer 6.0+ / 7.0+
- For viewing Q-Flow Reports, the server hosting Reporting Services must be included in trusted sites of Internet Explorer

Q-Flow Topology Overview



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Other Common Hardware Considerations at Each Branch

NOTE: all hardware is commercially available

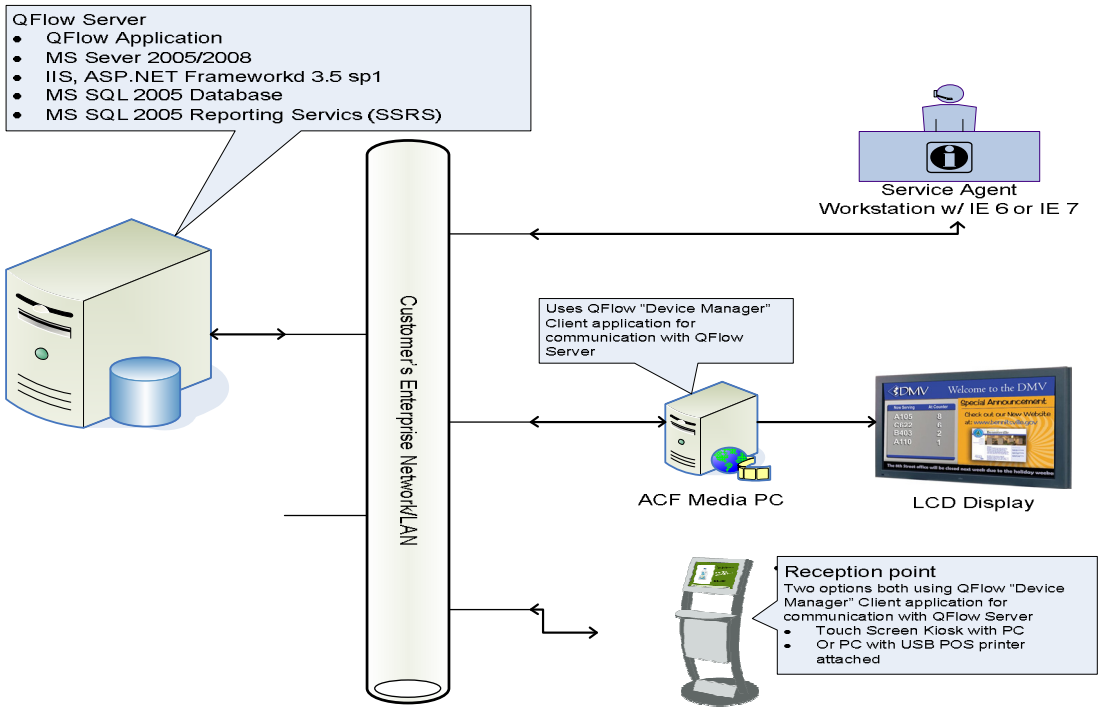
Ticket Printer
- Host PC if USB printer
- Network access with fixed IP if Network Printer

Self-Serve Kiosk
- Requires mounting location (wall or pillar, or freestanding if unit permits)
- Network access with fixed IP Address
- IE 6.0+ / 7.0+ browser
- 1 GB RAM

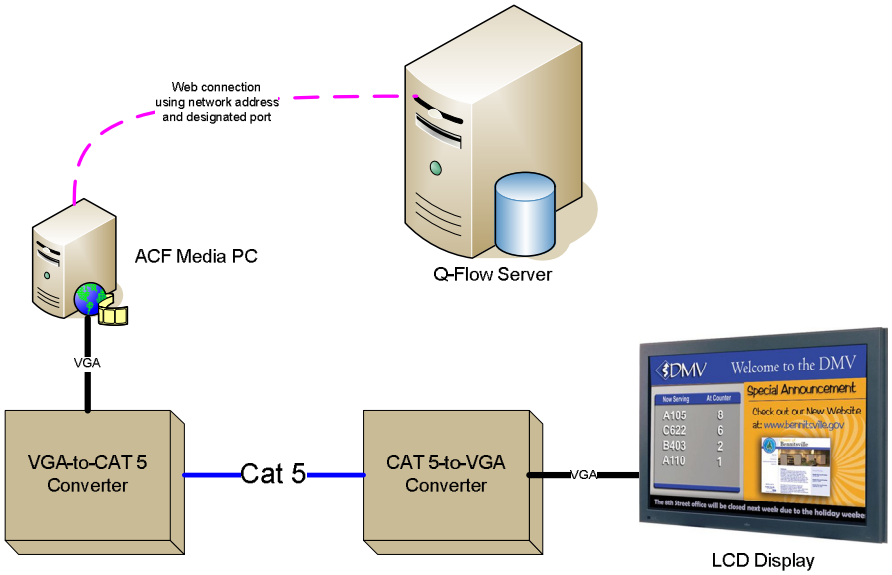
Video and Audio System
- The Media Player PC – MS Windows XP Pro+, Pentium-based processor w/ 1GB RAM
- MS Windows Media Player v11
- VGA and Audio over CAT 5/6 converters (requires power)
- Network connection with a fixed IP

LCD TV Monitor
- VGA / HDMI input and 1/8 inch din sound input.
- Cable TV / Satellite signal at site of Media Player if live TV overlay is desired

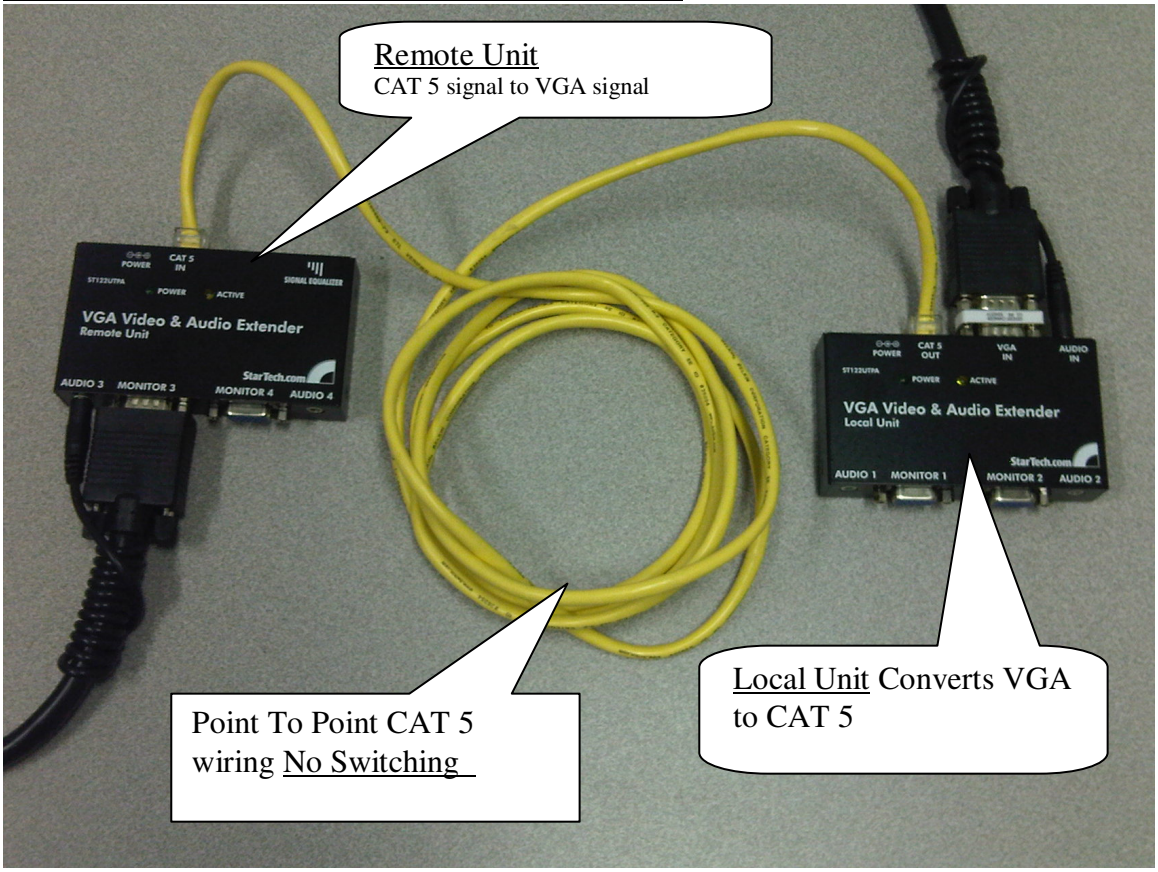
Display Setup Diagram 1.1


QFlow Server
QFlow Application
MS Sever 2005/2008
IIS, ASP.NET Frameworkd 3.5 sp1
MS SQL 2005 Database
MS SQL 2005 Reporting Servics (SSRS)
Service Agent
Workstation w/ IE 6 or IE 7
Customer's Enterprise Network/LAN
Uses QFlow "Device Manager" Client application for communication with QFlow Server
ACF Media PC
LCD Display
Reception point
Two options both using QFlow "Device Manager" Client application for communication with QFlow Server
Touch Screen Kiosk with PC
Or PC with USB POS printer attached

Display Setup Diagram 1.2



Video Signal Extensions setup (Diagram 1.3)



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VGA-To-CAT 5 Converter Close up (Diagram 1.4)

PROPOSED WORKFLOW WITH SCREEN SHOTS

Step 1: Patient Reception at the Touchscreen Kiosk

NOTES:

- Screen design is fully customizable
- Multi-screen design is typical
- Multi-lingual options
- One Touch philosophy embraced
- Scanners may be incorporated
- Tickets are fully customizable, including Wayfinding Directions

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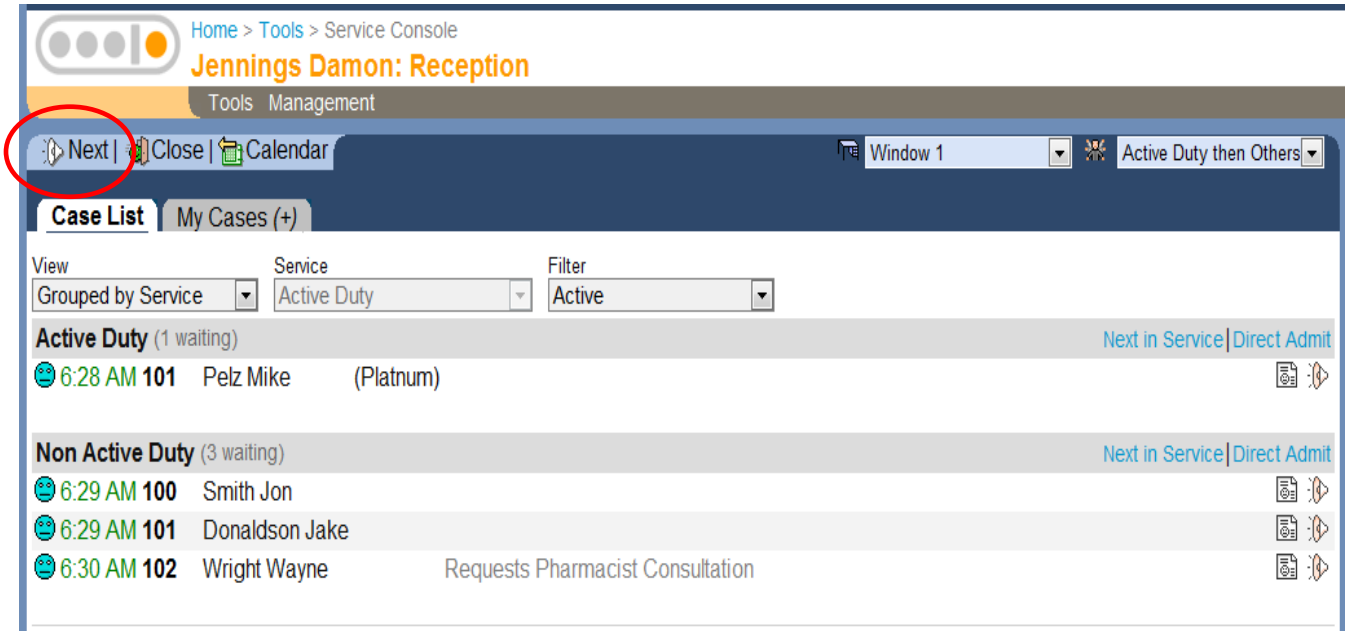
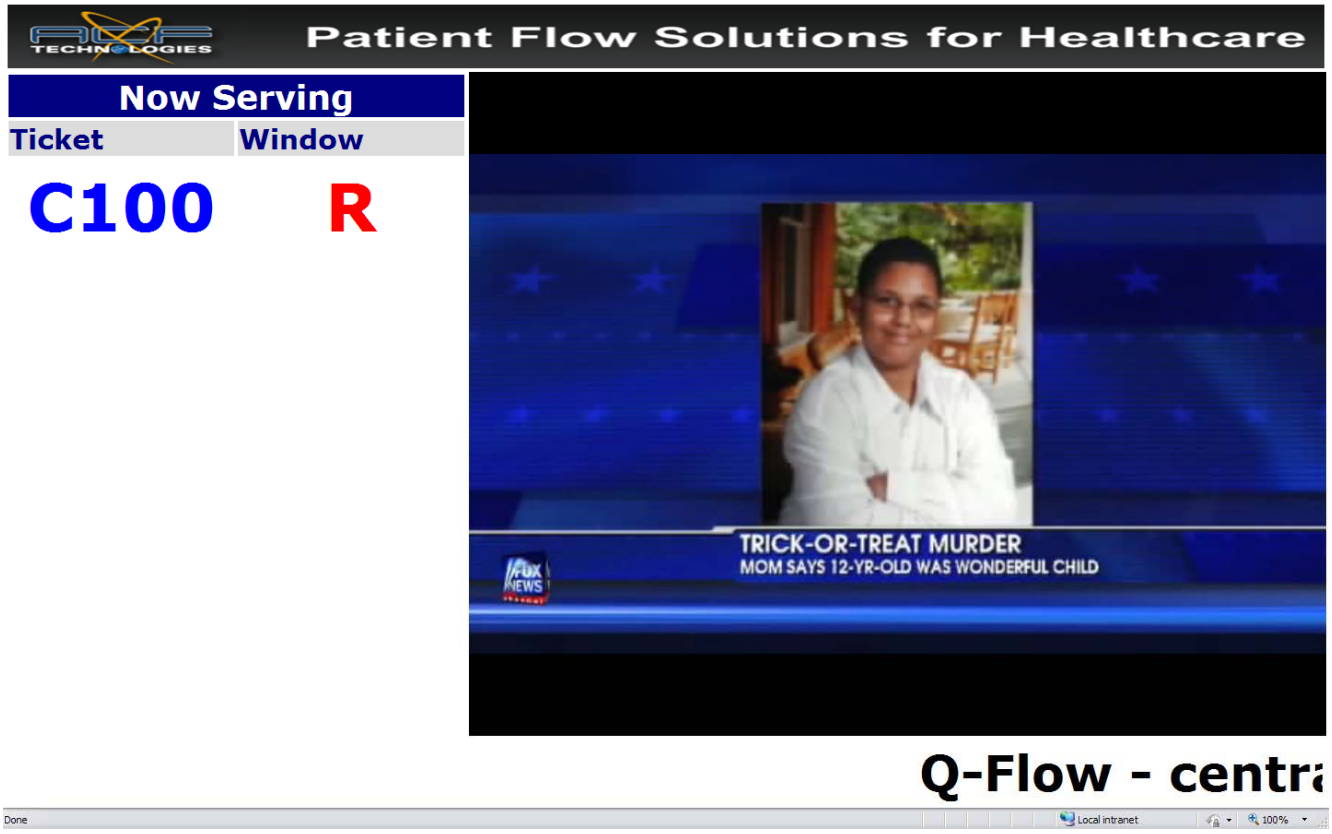
Step 2: Staff Calls Patient by Clicking NEXT



Notes:

- Service Console shows list of all waiting patients according to queue
- Service Console may be filtered according to Function (i.e. Job Role)
- NEXT Button is driven by configured automation, incl. BQ Threshold

Step 3: When Staff Clicks NEXT, Audio and Video Message Appears on TV alongside Cable TV or Announcements



NOTES:

- Content Frame (right frame) may be configured for CATV, Slides, or dynamic
- Font Sizes are adjustable
- Frame layouts are based on template designs included from ACF
- Typical layout includes:
    - Left Frame for calling patients
    - Right Frame for Dynamic Content
    - Scrolling Ticker for info, RSS, or Announcements

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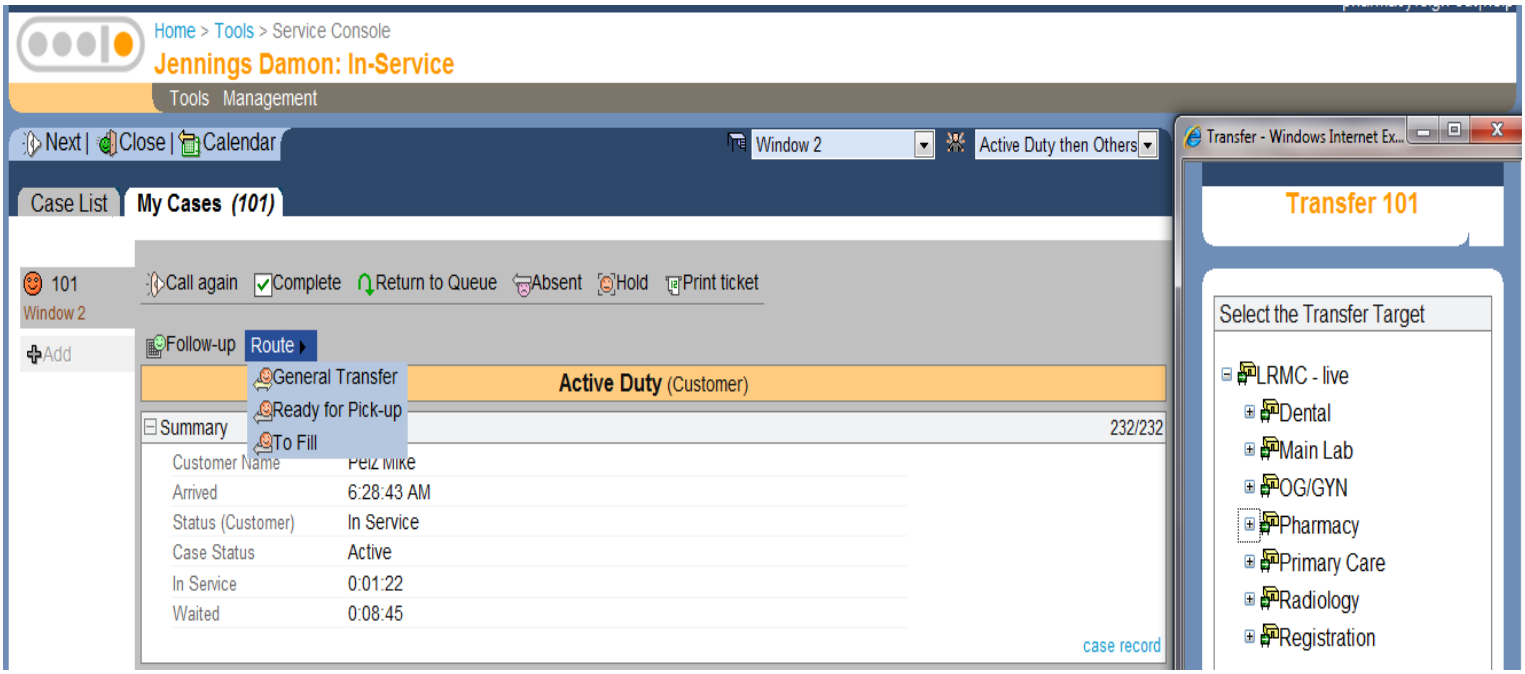
- Banner for Branding

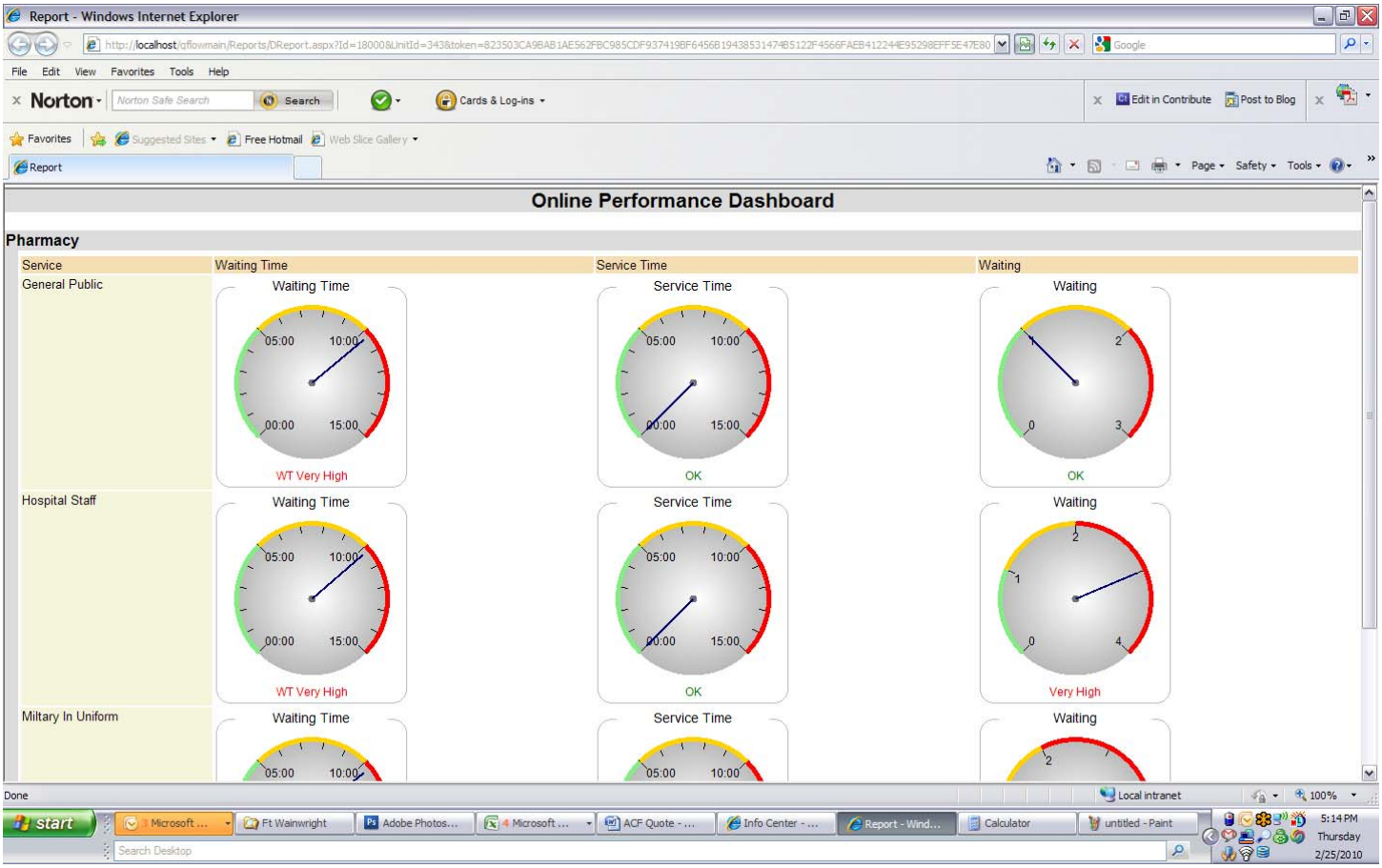
Step 5: Agent Advances Patient to Next Service using Routes



NOTES:

- Agents have on-screen access to wait times for all services
- Patient keeps original ticket – all transfers documented and reportable for “Entry to Exit” patient experience
- Transfers can be “rules based” to ensure proper regimented workflow (including dependencies)
- Transfers can incorporate User Permissions (e.g. Pharmacy Tech can’t escalate patient to LAB STAT queue)
- Transfers can offer Patient Control via simple barcode scanning (e.g. Patient may want to stop at café before proceeding to lab – transfer is performed in EXPECTED status until patient scans ticket to trigger WAITING status)

Step 5: Managers may View Real Time Dashboards and Reports



NOTES:

- All data is centralized on a single database
- Reporting levels are based on permissions and enterprise hierarchy (e.g. Lab Manager can't run reports on Pharmacy, but CIO can run reports across entire organization)
- Includes ACF Canned Reports, plus ad-hoc reporting via MS SQL Server Reporting Services

- Reports are Real Time (i.e. Dashboards) and historical

Additional Report Examples

Queue Dashboard

	Service	Waiting	W.Time
●	CT Scan	2	00:01:18
○	Imaging Appointment	0	00:00:00
●	MRI	2	00:01:17
●	Radiology and Imaging Reception	4	00:01:47
○	STAT	0	00:00:00
●	X-Ray	1	00:01:17

Service Performance Distribution

Service Performance Ext. Percentages

Date Range: 1/1/2008 - 6/2/2008

VISN 06 (Reporting Demo)

Asheville VA Medical Center (LIVE)

Service Name	Served	Abandoning	Total	% Under 5 min	% Under 10 min	% Under 15 min	% Under 20 min	% Under 25 min	% Under 30 min	% Under 35 min	% Under 40 min	% Under 45 min	% Over 45 min
Pharmacist Consultation (A)	7228	715	7943	97.62%	99.42%	99.76%	99.9%	99.94%	99.97%	100%	100%	100%	0%
Primacy Care (B)	3776	403	4179	93.94%	98.09%	99.05%	99.63%	99.97%	99.97%	99.97%	99.97%	100%	0%
Lab (C)	14595	1808	16403	73.02%	82.89%	90.04%	94.5%	96.92%	98.4%	99.12%	99.45%	99.7%	0.3%
Waiting For Prescription (D)	15353	451	15804	16.41%	49.93%	72.73%	86.17%	93.44%	96.5%	98%	98.79%	99.22%	0.78%
Average	10238.0	844.3	11082.3										
Sum	40952.0	3377.0	44329.0										

EQUIPMENT DATA

EQUIPMENT DESCRIPTION: MESSAGING BOARD, QUEUING KIOSK, PHARM WAITING AREA

ITEM SYMBOL: U0037A

MANUFACTURER: ACF TECHNOLOGIES **LOGCAT:** C

EXT DIM: 57.3"H X 16.56"W X 10.5"D **WEIGHT:** 109 LBS.

SEISMIC: NOS

HVAC:

HEAT GAIN (BTU/HR)

VENT SIZE: **CFM:** **S.P.**

REMARKS:

PLUMBING:

HOT WATER	**COLD WATER**	**TREATED WATER**
SIZE:	SIZE:	
PRESSURE:	PRESSURE:	SIZE:
FLOW RATE:	FLOW RATE:	PRESSURE:
TEMP.:		FLOW RATE:

STEAM	**DRAIN**	**RETURN**
SIZE:	SIZE:	PUMPED:
PRESSURE:		GRAVITY:
FLOW RATE:		SIZE:

	SIZE	**TYPE**	**PRESSURE**
OXYGEN:			
AIR:			
VACUUM:			
N20:			
NITROGEN:			
GAS:			

REMARKS:

ELECTRIC:

VOLTAGE: 120 **AMPS:** 8 **WATTS:**

PHASE: 1 **HZ:** 60 **H.P.:**

REMARKS:

SPECIAL REQUIREMENTS:

ITEM REQUIRES A DATA PORT AND A FLOOR DUPLEX RECEPTABLE. REQUIRES CONNECTIVITY TO THE QUEUE SYSTEM.

Designed for style and engineered for high performance!

THE STEALTH SERIES KIOSK

A WOLF IN SHEEP'S CLOTHING

The Stealth Series provides a line of elegant and fully functional interactive kiosks. Sleek in appearance, this kiosk fits into almost any environment and is available in a variety of finishes and colors to creatively enhance any self-service venue.

The Stealth combines a compact footprint and rugged field performance with standard model economy. This series offers generous LCD size, rugged keyboard and trackball options, and is available with a full range of overhead and panel signage to add visual impact to your application. Outdoor model options enable an expanded customer reach to an open-air self-service environment.

One of KIOSK's most popular and widely deployed models, the Stealth features hinged doors and readily accessible components for simple and efficient field maintenance. Custom graphic options emphasize corporate branding and provide optimal visibility for quick consumer adoption.

Inside, this kiosk is designed to accept a wide variety of optional components from biometrics to printers, monitors to card readers. Reliable and tested components.

See reverse for a detailed list of Stealth Series models, specifications and dimensions.

ISO 9001:2000 Certified

KIOSK Information Systems

FOR MORE INFORMATION CALL TOLL FREE: **800.509.5471**
OR VISIT US ONLINE AT **WWW.KIOSK.COM**

THE STEALTH SERIES: MODELS, SPECIFICATIONS AND DIMENSIONS

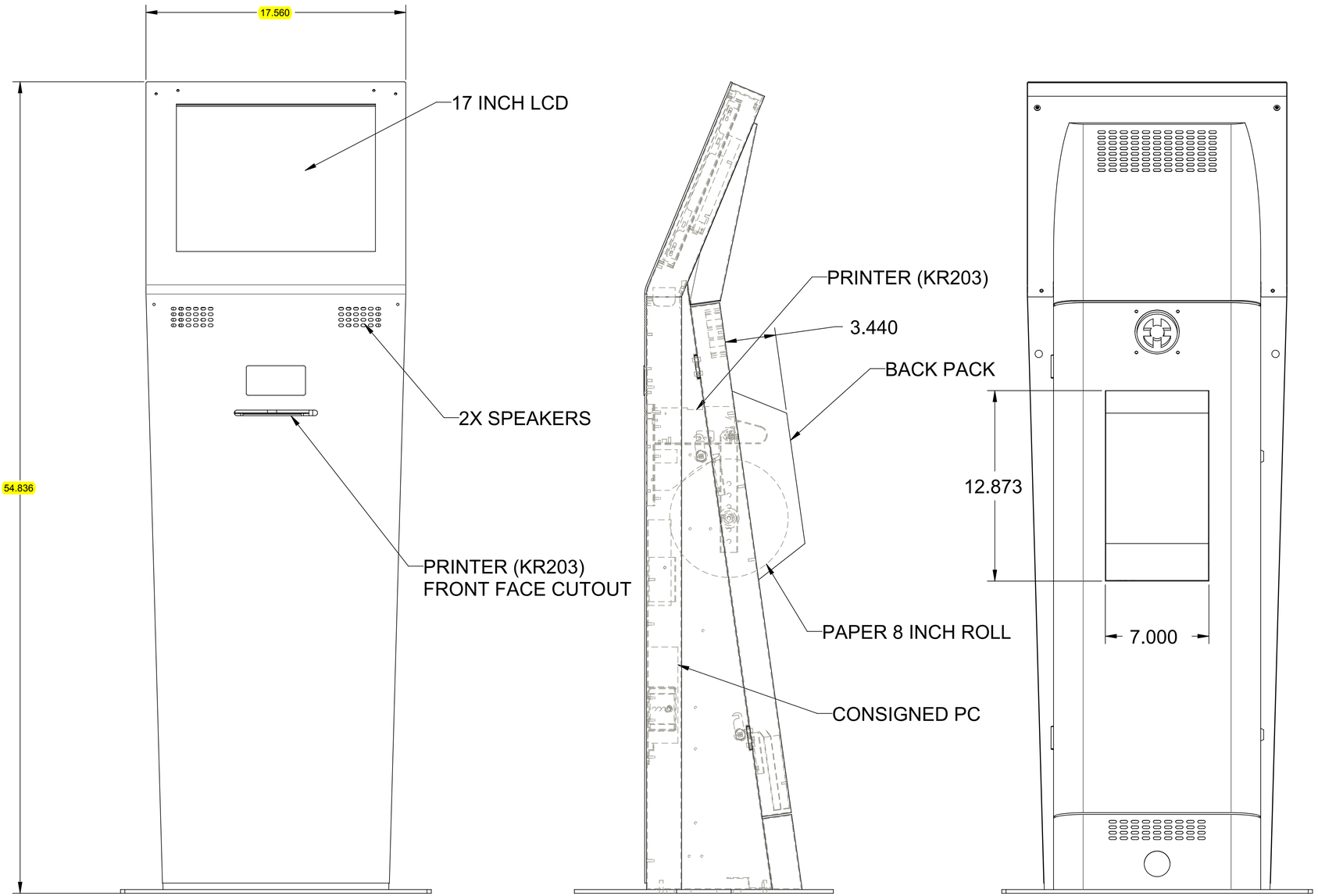
STEALTH SERIES	STANDARD CONFIGURATION:	DIMENSIONS:	OPTIONAL COMPONENTS:
	• Durable Powder Coated Steel Enclosure • Celeron or Pentium Dual Core Computer Genuine Intel Processor • Dual Amplified Speakers • 17" or 19" LCD Display (17" shown L, 19" R) • Touch Screen	• 16.56" Wide • 53.7" Tall • 10.5" Deep • Weight: 105 lbs 109 lbs for 19" LCD Display • Base Plate: 21" W, 17.5" D • Overhead Base Plate: 26" W, 26.1" D	• 19" Overhead Display*
	• Durable Powder Coated Steel Enclosure • Celeron or Pentium Dual Core Computer Genuine Intel Processor • Dual Amplified Speakers • 17" or 19" LCD Display (17" shown L, 19" R) • Rugged Keyboard and Trackball	• 16.56 " Wide • 53.7" Tall • 16.9" Deep • Weight: 113 lbs 117 lbs for 19" LCD Display • Base plate 21" W, 17.5" D • Overhead Base Plate: 26" W, 26.1" D	• 19" Overhead Display* • Touch Screen • 8.5" Wide Thermal printer • 80mm or 112mm Thermal Printer
	• Durable Powder Coated Steel Enclosure • Celeron or Pentium Dual Core Computer Genuine Intel Processor • Dual Amplified Speakers • 17" or 19" LCD Display (17" shown L, 19" R) • Touch Screen	• 16.56" Wide • 53.7" Tall • 10.5" Deep • Weight: 105 lbs 109 lbs for 19" LCD Display • Base Plate: 21" W, 17.5" D • Overhead Base Plate: 26" W, 26.1" D	• ~~19" Overhead Display*~~ • ~~1D / 2D Barcode Reader~~ • ~~MSR Smart Card Reader~~ • ~~8.5" Wide Thermal printer~~ • 80mm or 112mm Thermal Printer • ~~Rugged Keyboard and Trackball~~
 Sheltered Outdoor	• Durable Powder Coated Steel Enclosure • Celeron or Pentium Dual Core Computer Genuine Intel Processor • Dual Amplified Speakers • 17" or 19" Sunlight Readable LCD Display • Rugged Touch Screen • Weather-Seal Protection	• 20.7" Wide • 54" Tall • 13.7" Deep • Weight: 130 lbs • Base Plate: 23.4" W, 19" D	• MSR Smart Card Reader • Receipt Printer • 8.5" Wide Thermal printer
 Sheltered Outdoor	• Durable Powder Coated Steel Enclosure • Celeron or Pentium Dual Core Computer Genuine Intel Processor • Dual Amplified Speakers • 17" or 19" Sunlight Readable LCD Display • Rugged Keyboard and Trackball • Weather-Seal Protection	• 20.7" Wide • 54" Tall • 20" Deep • Weight: 138 lbs • Base Plate: 23.4" W, 19" D	• MSR Smart Card Reader • Receipt Printer • 8.5" Wide Thermal printer

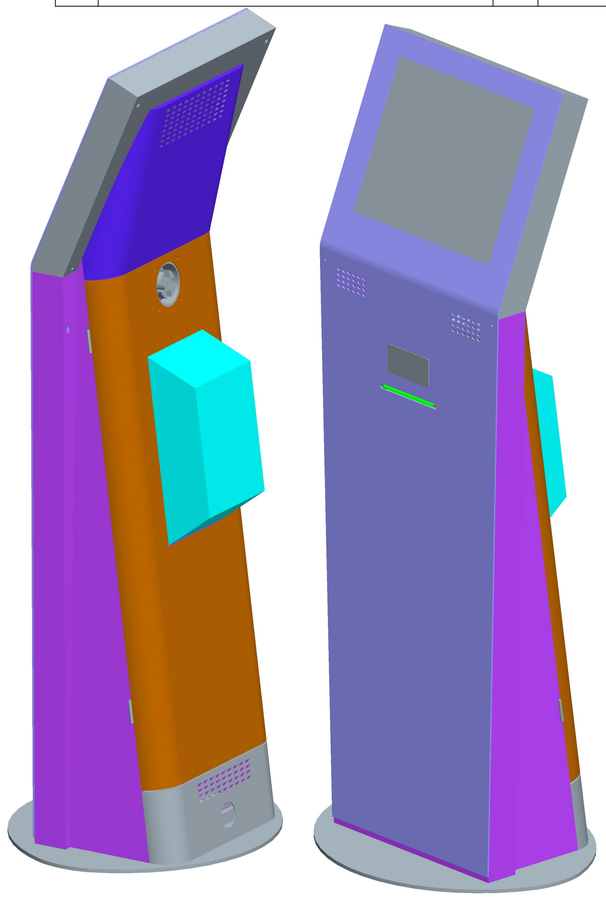
**19" Overhead Height 70.3", Width 17.5," Incremental 25 lbs.*

KIOSK™ Information Systems

ADDRESS: 346 SOUTH ARTHUR AVENUE • LOUISVILLE, CO 80027
PHONE: 303.466.5471 • TOLL-FREE: **1.800.509.5471**
FAX: 303.466.6730 • EMAIL: SALES@KIOSK.COM • WEB: **WWW.KIOSK.COM**

REVISIONS				
REV		DESCRIPTION	ENG	DATE
1.0		K12092	BAM	5-16-11





6. ALL STUDS TO BE INSERTED ALMOST FLUSH AND THEN GROUND AND SANDED FLUSH TO METAL.

5. ALL EDGES TO BE FREE OF SHARP EDGES AND BURRS.

4. TOLERANCES: .005 FEATURE.
.010 FEATURE TO FEATURE.
.015 FEATURE TO BEND.
.020 BEND TO BEND.

3. NEXT ASSEMBLY:

2. FINISH:

1. MATERIAL:

NOTES: UNLESS OTHERWISE STATED.

ALL DIMENSIONS. ARE IN INCHES UNLESS OTHERWISE SPECIFIED. THIS DRAWING IS THE PROPERTY OF KIOSK INFORMATION SYSTEMS, INC.	KIOSK Information Systems	346 S ARTHUR AVE. LOUISVILLE, CO 80027
	PART DESCRIPTION- CONCEPT DWG ACF Tech	
ENGINEER- BAM	PART NUMBER- K12092	REV- 1.0
DATE- 5-16-11		

EQUIPMENT DATA

EQUIPMENT DESCRIPTION: MESSAGING BOARD, MONITOR, QUE SYSTEM

ITEM SYMBOL: U0037B

MANUFACTURER: ACF TECHNOLOGIES **LOGCAT:** C

EXT DIM: 18.9"H X 31.1"W X 5.5"D **WEIGHT:** 35.3

SEISMIC: YES

HVAC:

HEAT GAIN (BTU/HR)

VENT SIZE: **CFM:** **S.P**.

REMARKS:

PLUMBING:

HOT WATER
SIZE:
PRESSURE:
FLOW RATE:
TEMP.:

COLD WATER
SIZE:
PRESSURE:
FLOW RATE:

TREATED WATER
TYPE:
SIZE:
PRESSURE:
FLOW RATE:

STEAM
SIZE:
PRESSURE:
FLOW RATE:

DRAIN
SIZE:

RETURN
PUMPED:
GRAVITY:
SIZE:

	SIZE	TYPE	PRESSURE
OXYGEN:			
AIR:			
VACUUM:			
N20:			
NITROGEN:			
GAS:			

REMARKS:

ELECTRIC:

VOLTAGE: 120 **AMPS:** **WATTS:** 140

PHASE: 1 **HZ:** 60 **H.P.:**

REMARKS:

SPECIAL REQUIREMENTS:

ITEM REQUIRES A CONDUIT CONNECTION BETWEEN DISPLAY AND KEYBOARD. ITEM REQUIRES A WALL RECEPTACLE NEAR THE DISPLAY CABINET. ITEM REQUIRES STRUCTURAL SUPPORT FOR INSTALLATION.

DATE: JULY 13, 2011

NEC MultiSync® Large-Screen LCD Series

32" (31.5" VIS), 40", 46" and 57" LCD displays
ideal for digital signage applications

Airports/flight and baggage information

DSTS Digital Signage Technology Suite

Digital merchandising

Corporate

Also serving markets such as...

Restaurants

Medical

Financial

Theaters

Tradeshows

Broadcasting

NEC

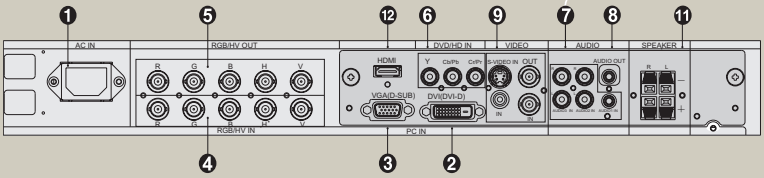
User-friendly, efficient design. As ease of installation is a main concern for the information display market, these displays were designed with light weight in mind, making them simple to transport and install wherever necessary. In addition, NEC is on the forefront of mounting technology as the displays' cabinets were designed to meet currently proposed VESA mounting standards for larger-sized public displays, which will be required of all manufacturers in the future. Their ability to be mounted in either portrait or landscape orientation further adds to your flexibility. With a uniformly thin frame, the displays' designs are ideal for multi-screen construction for virtually seamless video walls.

Simplified control of screen settings. For quick and easy setups, a multitude of presets, including automatic image adjust and automatic input detect, make MultiSync Large-Screen LCDs ready to go right out of the box. Their factory reset feature even allows you to return to the display's original settings if desired.

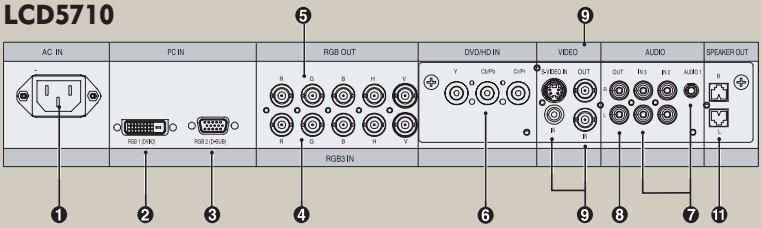
Intelligent power management ensures a smart investment. Utilizing energy-efficient technologies in their design, these displays reduce power consumption and significantly lower your total cost of ownership (TCO). The high-efficiency backlight reduces not only the power consumption but also the heat generation at the front of the screen, while the real-time clock's sleep/wake management scheduler improves energy savings and extends display life. In addition, the MultiSync LCD4020 and LCD4620 have been designed with two thermally controlled fans. Based on default temperature set points (or user-defined settings), sensors continuously monitor the interior temperature of the display. When the set temperature level is reached, the fans cool the display to the desired level. In cases in which the fans are unable to cool down the display, the backlights are dimmed or, as a last resort, the display is automatically shut down.

Figure 1

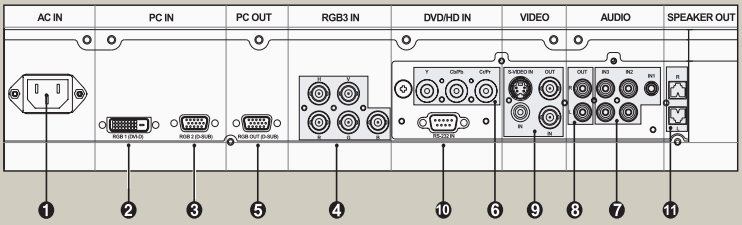
LCD4020/LCD4620

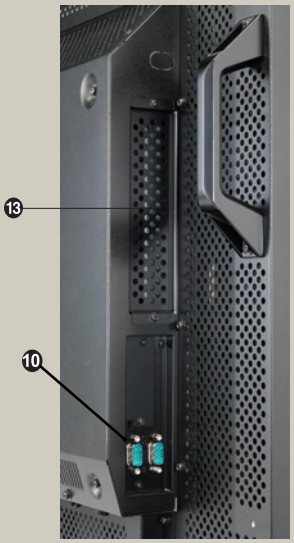


LCD5710



LCD3210





MultiSync Large-Screen LCDs feature a number of input connectors for maximum compatibility. This makes it possible to upgrade adapters or software without having to purchase a new display.

1. ***AC IN connector*** *Connects with the supplied power cord.*
2. ***RGB 1 IN (DVI-D)*** *To input digital RGB signals from a computer* * This connector does not support analog input.*
3. ***RGB 2 IN (mini D-Sub 15 pin)*** *To input analog RGB signals from a personal computer or other RGB equipment.*
4. ***RGB 3 DVD/HD [R, G, B, H, V] (BNC)*** *To input the analog RGB signals or signals from other RGB equipment. A Sync-on-Green signal can be connected to the G connector.*
5. ***RGB OUT connector (mini D-Sub 15 pin)*** *To output the signal from the RGB 2 or 3 IN connector.*
6. ***DVD/HD CONNECTOR (BNC)*** *Connecting equipment such as a DVD player, HDTV device or laser disc player.* (AV)
7. ***AUDIO IN 1,2,3*** *Input audio signal from external equipment such as a computer, VCR or DVD player.* (AV)
8. ***AUDIO OUT*** *Output the audio signal from the selected AUDIO IN source.* (AV)

(AV) *Denotes an AV unit function.*
All AV functions are enabled when the AV unit is installed.

9. ***VIDEO INPUT/OUTPUT CONNECTOR*** (AV)
   VIDEO IN connector (BNC and RCA): *Input a composite video signal. BNC and RCA are not available at the same time. (Use only one input).*
   VIDEO OUT connector (BNC): *Output the composite video signal from the VIDEO IN source.*
   S-VIDEO IN connector (DIN 4 pin): *Input the S-video (Y/C separate signal).*
10. ***EXTERNAL CONTROL (mini D-Sub 9 pin) RS-232C*** *Input signal from control equipment such as a computer.*
    In connector: *Input signal from control equipment such as a computer or the output from a different MultiSync LCD3210/LCD4020/LCD4620*
    LCD4610/LCD4010 only - Out connector: *To connect multiple MultiSync LCD4020/LCD4620*
11. ***EXTERNAL SPEAKER TERMINAL*** *Outputs the audio signal from the selected audio source.* (AV)
12. ***HDMI CONNECTOR*** *To input digital HDMI signals.* (AV)
13. ***EXPANSION SLOT*** *To connect ATSC/NTSC/QAM tuner or other third-party components*

U0037B

Model	LCD3210-BK (LCD3210-BK-IT)	LCD4020-BK-AV (LCD4020-BK-IT)	LCD4620-BK-AV (LCD4620-BK-IT)	LCD5710-BK (LCD5710-BK-IT)
Display				
Viewable Size Image	31.5"	40"	46"	57"
Pixel Pitch	0.511	0.648mm	0.746mm	0.6525mm
Pixels Per Inch	50 @ native resolution	40 @ native resolution	34 @ native resolution	39 @ native resolution
Brightness (typical)	500 cd/m²	500 cd/m²	500 cd/m²	450 cd/m²
Contrast Ratio (typical)	600:1	1200:1	1200:1	900:1
Viewing Angle (typical)	176° Vert., 176° Hor. (88U/88D/88L/88R)@ CR > 10	178° Vert., 178° Hor. (89U/89D/89L/89R)@ CR > 10	178° Vert., 178° Hor. (89U/89D/89L/89R)@ CR > 10	178° Vert., 178° Hor. (89U/89D/89L/89R)@ CR > 10
Response Time (typical)	Rapid Response (18ms)	Rapid Response (16ms)	Rapid Response (16ms)	Rapid Response (16ms)
Display Colors	256 RGB Level, more than 16 million	256 RGB Level, more than 16 million	256 RGB Level, more than 16 million	256 RGB Level, more than 16 million
Active Screen Area (W X H)	760 x 450mm	886.5 x 497.8mm	1018.5 x 574mm	1252.8 x 704.7mm
Bezel Width (L/R, T/B)	45.66mm, 43.372mm	15.5mm, 15.5mm	16.5mm, 17mm	52.5mm, 44mm
Screen Aspect Ratio	16:9	16:9	16:9	16:9
Synchronization Range				
Horizontal	-15.625, 15.744, 31.5-91.1 KHz (Analog, LCD3210-BK)/-31.5-91.1 KHz (Analog, LCD3210-BK-IT)/-31.5-91.1 KHz (Digital)	-15.625, 15.744, 31.5-91.1 KHz (Analog, LCD4020-BK-AV)/-31.5-91.1 KHz (Analog, LCD4020-BK-IT)/-31.5-91.1 KHz (Digital)	-15.625, 15.744, 31.5-91.1 KHz (Analog, LCD4620-BK-AV)/-31.5-91.1 KHz (Analog, LCD4620-BK-IT)/-31.5-91.1 KHz (Digital)	-15.625, 15.744, 31.5-91.1 KHz (Analog, LCD4610-BK)/-31.5-91.1 KHz (Analog, LCD4610-BK-IT)/-31.5-91.1 KHz (Digital)
Vertical	50-85 Hz Analog/Digital	50-85 Hz Analog/Digital	50-85 Hz Analog/Digital	50-85 Hz Analog/Digital
Input Signal				
Video	ANALOG RGB 0.7 Vp-p / 75 Ohms	ANALOG RGB 0.7 Vp-p/75 Ohms, Digital, S-Video, HDMI, Composite, Component, Audio	ANALOG RGB 0.7 Vp-p/75 Ohms, Digital, S-Video, HDMI, Composite, Component, Audio	ANALOG RGB 0.7 Vp-p / 75 Ohms
Sync	Separate sync: TTL Level (Positive/Negative) Composite sync: TTL Level (Positive/Negative) Composite sync on green: (0.3Vp-p negative 0.7Vp-p positive)	Separate sync: TTL Level (Positive/Negative) Composite sync: TTL Level (Positive/Negative) Composite sync on green: (0.3Vp-p negative 0.7Vp-p positive)	Separate sync: TTL Level (Positive/Negative) Composite sync: TTL Level (Positive/Negative) Composite sync on green: (0.3Vp-p negative 0.7Vp-p positive)	Separate sync: TTL Level (Positive/Negative) Composite sync: TTL Level (Positive/Negative) Composite sync on green: (0.3Vp-p negative 0.7Vp-p positive)
Input				
RGB1	DVI-D	DVI-D	DVI-D	DVI-D
RGB2	Analog D-sub	Analog D-sub	Analog D-sub	Analog D-sub
RGB3	Analog BNC	Analog BNC	Analog BNC	Analog BNC
Video 1*	Composite RCA or S-Video	Composite (Shared RCA and BNC), S-Video, HDMI	Composite (Shared RCA and BNC), S-Video, HDMI	Composite RCA or S-Video
Component Video 1 (DVD/HD)*	Component BNC	Component (RCA)	Component (RCA)	Component BNC
Audio*	Audio 1 (minijack), Audio 2 and 3 Stereo (RCA)	Audio 1 (minijack), Audio 2 and 3 Stereo (RCA), HDMI	Audio 1 (minijack), Audio 2 and 3 Stereo (RCA), HDMI	Audio 1 (minijack), Audio 2 and 3 Stereo (RCA)
External Control	Internal Speaker: None RS232, DDC/CI	Internal Speaker: None RS232, DDC/CI	Internal Speaker: None RS232, DDC/CI	Internal Speaker: None RS232, DDC/CI
Output				
RGB	Daisychain RGB3	Daisychain BNC - RGB3	Daisychain BNC - RGB3	Daisychain RGB2, RGB3
Video*	Daisychain Video1	Daisychain BNC (Composite) - Video1	Daisychain BNC (Composite) - Video1	Daisychain Video1
Audio*	Daisychain - Selected Audio in	Daisychain - Mini Pin Jack	Daisychain - Mini Pin Jack	Daisychain - Selected Audio in
Control	RS232 for multiple monitor control	RS232 for multiple monitor control	RS232 for multiple monitor control	RS232 for multiple monitor control
Audio Amplifier*	7W x 7W	15W x 15W	15W x 15W	7W x 7W
Resolutions Supported	720 x 400 @ 70-85 Hz 640 x 480 @ 60-85 Hz 800 x 600 @ 50-85 Hz 832 x 624 @ 74.5 Hz 1024 x 768 @ 50-85 Hz 1280 x 1024 @ 50-85 Hz 1600 x 1200 @ 60 Hz (Compressed) 1280 x 768 @ 50-85 Hz 1360 x 768 @ 50-85 Hz NTSC/PAL, SECAM, 4.43 NTSC, Pal60 HDTV, 480i, 480p, 720p, 1080i (not available on LCD3210-BK-IT)	640 x 400 @ 56.2 Hz 720 x 400 @ 70-85 Hz 640 x 480 @ 50-85 Hz 800 x 600 @ 50-85Hz 832 x 624 @ 74.5 Hz 1024 x 768 @ 50-85 Hz 1152 x 870 1600 x 1200 @ 50-85 Hz 1280 x 768 @ 50-85 Hz 1360 x 768 @ 50-85 Hz 1920 x 1080 @ 60Hz (compressed) NTSC/PAL, SECAM, 4.43 NTSC, Pal60 HDTV, 480i, 480p, 720p, 1080i, 1080p (not available on LCD4020-BK-IT)	640 x 400 @ 56.2 Hz 720 x 400 @ 70-85 Hz 640 x 480 @ 50-85 Hz 800 x 600 @ 50-85 Hz 832 x 624 @ 74.5 Hz 1024 x 768 @ 50-85 Hz 1152 x 870 1600 x 1200 @ 50-85 Hz 1280 x 768 @ 50-85 Hz 1360 x 768 @ 50-85 Hz 1920 x 1080 @ 60 Hz (compressed) NTSC/PAL, SECAM, 4.43 NTSC, Pal60 HDTV, 480i, 480p, 720p, 1080i, 1080p (not available on LCD4620-BK-IT)	720 x 400 @ 70-85 Hz 640 x 480 @ 60-85 Hz 800 x 600 @ 50-85 Hz 832 x 624 @ 74.5 Hz 1024 x 768 @ 50-85 Hz 1280 x 1024 @ 50-85 Hz 1600 x 1200 @ 60 Hz (Compressed) 1280 x 768 @ 50-85 Hz 1360 x 768 @ 50-85 Hz 1920 x 1080 @ 50-60 Hz NTSC/PAL, SECAM, 4.43NTSC, Pal60 HDTV, 480i, 480p, 720p, 1080i (not available on LCD5710-BK-IT), 1080p
Native Resolution	1366 x 768	1366 x 768	1366 x 768	1920 x 1080
Recommended Resolution	1360 x 768 or 1366 x 768	1360 x 768 or 1366 x 768	1360 x 768 or 1366 x 768	1920 x 1080
Additional Features	Power Management, Plug and Play (DDC/CI, DDC2B), PIP (Remote), Multi-level Zoom, FullScan, TileMatrix, TileComp, Screen Saver, Rapid Response, Video Ready (no tuner), Infrared remote control included, removeable stand included	Expansion slot, ultra-thin bezel, programable lookup tables, Plug and Play (DDC/CI, DDC2B), PIP (remote), POP, 6-axis color control, multi-level zoom, FullScan, CableComp, TileMatrix (5x5), TileComp, video ready, scheduler (w/ RTC), OmniColor (NCM), sharpness/softness, off-timer (countdown), screen saver, vacation switch, 10-bit gamma, AutoBright (signal input), Windows Vista-compliant	Expansion slot, ultra-thin bezel, programable lookup tables, Plug and Play (DDC/CI, DDC2B), PIP (remote), POP, 6-axis color control, multi-level zoom, FullScan, CableComp, TileMatrix (5x5), TileComp, video ready, scheduler (w/ RTC), OmniColor (NCM), sharpness/softness, off-timer (countdown), screen saver, vacation switch, 10-bit gamma, AutoBright (signal input), Windows Vista-compliant	Power Management, Plug and Play (DDC/CI, DDC2B), PIP (Remote), Multi-level Zoom, FullScan, 6-axis color, CableComp, TileMatrix, TileComp, Screen Saver, Rapid Response, Video Ready (no tuner), Infrared remote control included
Touch-Capable	Designed for integration	Designed for integration	Designed for integration	Designed for integration
Voltage Rating	AC 100-120V / AC 220-240V @ 50/60 Hz	AC 100-120V / AC 220-240V @ 50/60 Hz	AC 100-120V / AC 220-240V @ 50/60 Hz	AC 100-120V / AC 220-240V @ 50/60 Hz
Power Consumption (typical)				
On	140W	240W	240W	350W
Power Savings Mode	< 5W	< 5W	< 5W	< 5W
Dimensions (WxHxD)				
Net (with stand)	31.1 x 20.1 x 7.9 in./789 x 510.3 x 200mm	36.2 x 22.4 x 13 in./919.5 x 567 x 330mm	41.6 x 25.4 x 13.8 in. /1056.6 x 645.2 x 350.3mm	53.5 x 32.5 x 19.4 in. /1357.8 x 825.1 x 492mm
Net (without stand)	31.1 x 18.9 x 5.5 in./789 x 479 x 140mm	36.2 x 21 x 5.5 in./919.5 x 533.4 x 140mm	41.6 x 24 x 5.5 in./1056.6 x 609.6 x 140mm	53.5 x 31.2 x 6.5 in./1357.8 x 792.8 x 164mm
Net Weight				
(with stand)	37.5 lbs./17 kg	68.6 lbs. / 31.1 kg	83.6 lbs. / 37.9 kg	138.9 lbs. / 63 kg
(without stand)	35.3 lbs./16 kg	64.8 lbs. / 29.4 kg	79.6 lbs. / 36.1 kg	130.1 lbs. / 59 kg
VESA Hole Configuration Specifications	200 x 200mm (8 hole) / 200 x 100mm (6 hole)	200 x 200mm (8 hole) / 200 x 100mm (6 hole)	200 x 200mm (8 hole) / 200 x 100mm (6 hole)	200 x 200mm (8 hole) / 200 x 100mm (6 hole)
Environmental Conditions				
Operating Temperature	5-40° C/41-104° F	5-40° C/41-104° F	5-40° C/41-104° F	5-40° C/41-104° F
Operating Humidity	20-80%	10-80%	10-80%	20-80%
Operating Altitude	4200m/13,780 ft.	4200m/13,780 ft.	4200m/13,780 ft.	4200m/13,780 ft.
Storage Temperature	-20-60° C/-4-140° F	-20-60° C/-4-140° F	-20-60° C/-4-140° F	-20-60° C/-4-140° F
Storage Humidity	10-90%	10-90%	10-90%	10-90%
Storage Altitude	12,000m/39,370 ft.	12,000m/39,370 ft.	12,000m/39,370 ft.	12,000m/39,370 ft.
Regulatory Approvals	UL 1950/CSA C22.2 No. 950/TUV-GS/EN60950/FCC-B/DOC-B/EN55022-B/EN55024/EN61000-3-2/EN1000-3-3/CE	UL 60950/CSA C22.2 No. 950/TUV-GS/EN60950/FCC-B/DOC-B/EN55022-B/EN55024/EN61000-3-2/EN1000-3-3/CE	UL 60950/CSA C22.2 No. 950/TUV-GS/EN60950/FCC-B/DOC-B/EN55022-B/EN55024/EN61000-3-2/EN1000-3-3/CE	UL 60950/CSA C22.2 No. 950/TUV-GS/EN60950/FCC-B/DOC-B/EN55022-B/EN55024/EN61000-3-2/EN1000-3-3/CE
Included Accessories	AC power cord,user manual, setup sheet, wireless remote control, batteries, 15-pin RGB cable, CD-ROM, stands	AC power cord, user manual, setup sheet, wireless remote control, batteries, 15-pin RGB cable, CD-ROM, stands	AC power cord, user manual, setup sheet, wireless remote control, batteries, 15-pin RGB cable, CD-ROM, stands	AC power cord, user manual, wireless remote control, batteries, 15-pin RGB cable, CD-ROM
Optional Accessories	External speakers	External speakers, digital tuner	External speakers, digital tuner	External speakers
Limited Warranty	3 year parts and labor, including backlight	3 year parts and labor, including backlight	3 year parts and labor, including backlight	3 year parts and labor, including backlight
Technical Support	24 hours/7 days	24 hours/7 days	24 hours/7 days	

* not available on IT models

ENERGY STAR

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NEC